

Amendment to the Drawings:

The attached sheet of the drawings includes changes to Fig. 2. This sheet, which includes Fig. 2-3, replaces the original sheet including Fig. 2-3. In Figure 2, element 202A has been changed to 203B and element 202B has been changed to 203B.

REMARKS

Applicants have carefully reviewed this Application in light of the Final Office Action mailed July 14, 2003 (Paper No. 10). Claims 27-32 were previously cancelled without prejudice or disclaimer, Claim 7 has been cancelled, and Claims 1-6 and 8-26 are pending in this Application. Claims 1 and 10-12 stand rejected under 35 U.S.C. § 102(e). Claims 2-9 and 13-26 stand rejected under 35 U.S.C. § 103(a). Applicants have amended Claims 1, 8 and 16 to further define various features of Applicants' invention. Applicants respectfully request reconsideration and favorable action in this case.

Rejection under 35 U.S.C. § 102

Claims 1 and 10-12 stand rejected by the Examiner under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent 6,335,240 issued to Yeong-kwan Kim et al. ("Kim").

Kim discloses a method for forming a capacitor for a semiconductor device that uses a three dimensional storage node with a silicon containing conductive layer to increase capacitance. (Col. 2, lines 15-20).

Claim 1, as amended, recites a method comprising the step of "heating the substrate to a temperature sufficiently low so that precursor adsorbed on the substrate is not thermally dissociated."

Applicants submit that the cited reference fails to disclose each and every element of Applicants' invention. Kim fails to disclose a method of fabricating a conformal film on a substrate comprising, "heating the substrate to a temperature sufficiently low so that precursor adsorbed on the substrate is not thermally dissociated," as recited in amended Claim 1. The cited reference fails to disclose the recited limitations and, therefore, cannot anticipate amended Claim 1.

Given that Claims 10-12 depend from Claim 1, Applicants respectfully submit that Claims 10-12 are allowable. As such, Applicants respectfully request that the Examiner withdraw the rejections and allow Claims 1 and 10-12.

Rejection under 35 U.S.C. § 103

Claims 2-9, 13-14 and 16-26 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kim as applied to Claim 1 above and further in view of U.S. Patent Publication No. US 2002/0106846 filed by Sean M. Seutter et al. ("Seutter").

Claim 15 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Kim and Seutter as applied to the claims above and further in view of U.S. Patent No. 5,616,177 issued to Norihide Yamada.

Seutter discloses a method of forming a tantalum-nitride layer film for use in integrated circuit fabrication. (Page 1, Paragraph [009]). After forming one or more layers, Seutter further discloses plasma annealing a tantalum-nitride film at a temperature which does not melt, sublime, or decompose the tantalum nitride film. (Page 4, Paragraph [0055] and Page 5, Paragraph [0061]).

Claim 1, as amended, recites a method comprising the step of "heating the substrate to a temperature sufficiently low so that precursor adsorbed on the substrate is not thermally dissociated."

Claim 17 recites a method comprising the step of "heating the substrate to a temperature so that precursor adsorbed on the substrate is not thermally dissociated."

Applicants respectfully submit that the cited references fail to disclose every element of Applicants' invention. Further, there is no motivation, suggestion or teaching to combine Kim and Seutter. For instance, neither Kim nor Seutter teach, disclose or suggest a method of fabricating a conformal film on a substrate comprising "heating the substrate to a temperature sufficiently low so that precursor adsorbed on the substrate is not thermally dissociated," as recited by amended Claim 1. Additionally, neither Kim nor Seutter teach, disclose or suggest a method for fabricating a thin AlO_x film on a substrate comprising "heating the substrate to a temperature so that precursor adsorbed on the substrate is not thermally dissociated," as recited by Claim 17. Furthermore, Applicants submit that Seutter's use of plasma annealing after initial film formation to reduce nitrogen content of one or more sublayers (Page 5, Paragraph [0058]) does not make obvious Applicants' use of heating a substrate to a sufficiently low temperature before or during film formation so that a continuous monolayer of precursor adsorbed on the substrate is not thermally dissociated. (Specification, Page 14, Lines 3-6). The cited references fail to disclose the recited limitations and, therefore, cannot render obvious Claims 1 and 17.

Given that Claims 2-6, 8, 9 and 13-16 depend from Claim 1 and Claims 18-26 depend from Claim 17, Applicants respectfully submit that Claims 2-6, 8, 9, 13-16 and 18-26 are allowable. As such, Applicants respectfully request that the Examiner withdraw the rejections and allow Claims 2-6, 8, 9, 13-16 and 17-26.

CONCLUSION

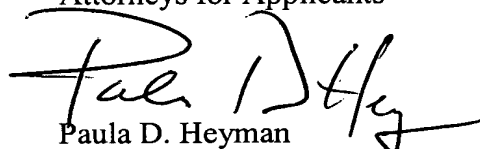
Applicants appreciate the Examiner's careful review of the application. Applicants have now made an earnest effort to place this case in condition for allowance in light of the amendments and remarks set forth above. For the foregoing reasons, Applicants respectfully request reconsideration of the rejections and full allowance of Claims 1-6 and 8-26 as amended.

Applicants believes that no fee is due, however, the Commissioner is hereby authorized to charge any fees to Deposit Account No. 50-2148 of Baker Botts L.L.P. in order to effectuate this filing.

If there are any matters concerning this application that may be cleared up in a telephone conversation, please contact Applicants' attorney at 512.322.2581.

Respectfully submitted,

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